JPRS-UCC-85-001

1 February 1985

USSR Report

CYBERNETICS, COMPUTERS AND AUTOMATION TECHNOLOGY

TABLE OF CONTENTS

JPRS-UCC-84-001, 23 February 1984-

JPRS-UCC-84-005, 31 October 1984

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sou ces are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semimonthly by the NTIS, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

JPRS-UCC-84-001

23 February 1984

USSR REPORT

CYBERNETICS, COMPUTERS AND AUTOMATION TECHNOLOGY

CONTENTS

GENERAL

Status of Scientific Research in Field of Computer Technology in Country's Vuzes
(Yu. M. Smirnov; IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 1

Problems of Improving Management of Use of Computer Technology in Higher Schools
(A. Ya. Savel'yev, N. M. Kogdov, et al.; IZVESTIYA VYSHHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 6

Discarded Computer
(A. Karnaukha; SOTSIALISTICHESKAYA INDUSTRIYA, 3 Sep 83). 11

Computers on the Job
(B. Konovalov; IZVESTIYA, 17 Sep 83)..... 13

HARDWARE

Microcomputers in the Shop
(A. Romanov; IZVESTIYA, 14 Oct 83)... 18

Autonomous Microprocessor Controllers for Scientific Research Automation Systems
(A. B. Artamonov, L. K. Golovina, et al.; IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 22

Microprocessors for Analog Signal Processing
(V. B. Smolov, Ye. P. Ugryumov, et al.; IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 29

Optoelectronic Programmable Logic Arrays
(S. K. Li, E. A. Mnatsakanyan, et al.; AVTOMETRIYA, No 4, Jul-Aug 83)..... 35

Method of Acceleration of Arithmetic Calculations
(V. V. Barashenkov, O. G. Kokayev, et al.; IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 42

High-Performance Specialized Processors for Calculation of Elementary and Special Functions
(V. B. Smolov, A. I. Vodyakho, et al.; IZVESTIYA VYSHHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 47

System for Recording and Input to Computer of One-Dimensional Images of Dim Objects and High-Speed Processes
(Yu. V. Bondarenko, V. Ya. Budtsev, et al.; AVTOMETRIYA, No 4, Jul-Aug 83)..... 54

Methods for Solving Printed Circuit Board Design Problems With the 15UT-4-017 Interactive Graphics Systems
(V. Ye. Mezhov; AVTOMETRIYA, No 4, Jul-Aug 83) 60

SOFTWARE

Valuation of a Programmer's Work
(G. Pasternak-Taranushenko; EKONOMICHESKAYA GAZETA, No 36, Sep 83)..... 61

Software Debugging Devices for Microprocessors
(P. P. Sypchuk, A. D. Ivannikov, et al.; IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 62

Structural Approach to Design of Multiprocessor Database Management System
(N. P. Vashkevich, S. A. Zinkin, et al.; IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 73

APPLICATIONS

Image Input/Output Controller-Interface Based on 16-Bit Microprocessor
(A. M. Ostapenko, V. A. Sluyev; AVTOMETRIYA, No 4, Jul-Aug 83)..... 85

Industrial Optodigital Inspection System
(V. V. Vertoprakhov, S. V. Mikhlyayev, et al.; AVTOMETRIYA, No 4, Jul-Aug 83)..... 93

Effect of Automated Control Systems
(Yu. Sosin; EKONOMICHESKAYA GAZETA, No 34, Aug 83)..... 102

Improving Effects of Automated Management Systems
(A. Dukhanin; EKONOMICHESKAYA GAZETA, No 40, Oct 83)..... 104

Improving Labor Discipline With Computerized Personnel Management Discussed
(A. Abasov; EKONOMIKA I ZHIZN', No 7, Jul 83)..... 106

Improving Automated Statistical Data Processing
(Valeriy Nazarov; EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV, No 7, Jul 83)..... 111

Automated Processing Improves Accounting and Analysis
(N. Grudinin, A. Vasil'yev; EKONOMICHESKAYA GAZETA, No 39, Sep 83)..... 117

Collective-Use Computer Centers Created in Ukraine
(I. Iskra; VESTNIK STATISTIKI, No 8, Aug 83)..... 120

Improving Accounting for Magnetic Information Media at Computer Centers
(V. Nazarchuk; EKONOMIKA SOVETSKOY UKRAINY, No 7, Jul 83)..... 123

Computer on the Phone
(B. Gisser; SOVETSKAYA MOLDAVIYA, 21 Aug 83)..... 127

PUBLICATIONS

Table of Contents of IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, September 1983
(IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENIY: PRIBOROSTROYENIYE, No 9, Sep 83)..... 129

Table of Contents: AVTOMETRIYA, No 4, July-August 1983
(AVTOMETRIYA, No 4, Jul-Aug 83)..... 131

JPRS-UCC-84-002
26 March 1984

USSR Report

CYBERNETICS, COMPUTERS AND AUTOMATION TECHNOLOGY

TABLES OF CONTENTS
No. 67, 21 January 1983-
No. 75, 27 October 1983

FBIS FOREIGN BROADCAST INFORMATION SERVICE

JPRS-UCC-84-003

4 May 1984

USSR REPORT

CYBERNETICS, COMPUTERS AND AUTOMATION TECHNOLOGY

CONTENTS

GENERAL

Evolution of Information Science Discussed
(V. S. Mikhalevich Interview; PRAVDA, 12 Nov 83)..... 1

YeS-1033 Computer Used for Objective Socialist Competition Results
(V. Semenov; STROITEL'NAYA GAZETA, 7 Oct 83)..... 4

Service, Standardization, Training Excoriated
(V. Vinokurov, K. Zuyev; LITERATURNAYA GAZETA, No 48, 30 Nov 83)..... 7

Problems With Computer Load and Data Preparation
(A. Golubets; EKONOMICHESKAYA GAZETA, No 48, Nov 83)..... 11

Lack of Incentives, Other Problems in Use of CAD
(V. Shkabatur, L. Lyakhovetskiy; SOTSIALISTICHESKAYA INDUSTRIYA, 24 Dec 83)..... 12

HARDWARE

Automated Image Processing (Part 1, Specialized Image Processing Systems)
(S. E. Val'teris, S. L. Gorelik, et al.; TRUDY AKADEMII NAUK LITOVSKOY SSR, SERIYA B: KHIMIYA, TEKHNIKA, FIZICHESKAYA GEOGRAFIYA, No 3(136), 1983)..... 15

Automated Image Processing (Part 2, Basic Concepts in Image Processing Theory)
(S. E. Val'teris, L. P. Yaroslavskiy; TRUDY AKADEMII NAUK LITOVSKOY SSR, SERIYA B: KHIMIYA, TEKHNIKA, FIZICHESKAYA GEOGRAFIYA, No 3(136), 1983)..... 24

Automated Image Processing (Part 3, Computer Architecture for Electronic-Optical and Digital Image Processing Systems)
(S. E. Val'teris, S. L. Gorelik, et al.; TRUDY AKADEMII NAUK LITOVSKOY SSR, SERIYA B: KHIMIYA, TEKHNIKA, FIZICHESKAYA GEOGRAFIYA, No 3(136), 1983)..... 29

Solar-Powered Elektronika MK-60 Microcalculator
(EKONOMIKA SEL'SKOGO KHOZYAYSTVA, No 12, Dec 83)..... 45

Qualitative Analysis of Spatially Distributed Synchronizers
(Gennadiy Ivanovich Lamanov, Vyacheslav Ivanovich Smolin; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83)..... 46

Elektronika Calculators
(PRAVDA UKRAINY, 18 Nov 83)..... 52

Elektronika MK-42 Calculator
(EKONOMIKA SEL'SKOGO KHOZYAYSTVA, No 11, Nov 83)..... 55

UD-5 General-Purpose Diagnostic Unit
(Ya. Salenieks; NAUKA I TEKHNIKA, No 10, Oct 83)..... 56

SOFTWARE

Parallel Calculations in System With Local Interactions of Elements
(M. K. Valiyev, A. I. Mishin; AVTOMETRIYA, No 6, Nov-Dec 83)..... 58

APPLICATIONS

Industrial System for Computer-Aided Design of Multilayer Printed-Circuit Card Topology
(Vladimir Afans'yevich Artamonov, Aleksandr L'vovich Kuznetsov, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83)..... 69

Simulation Subsystem in Computer-Aided Design System for Navigation Instruments
(R. I. Sol'nitsev, A. S. Presnyak, et al.; MEKHANIZATSIYA I AVTOMATIZATSIYA UPRAVLENIYA (NAUCHNO-PROIZVODSTVENNYY SBORNIK), No 4, Oct-Dec 83).... 79

Progress in Academy of Sciences on Scientific Research Related to Development of the Theory of Industrial Robots and Their Application
(V. Petrauskas, S. Skebiene; TRUDY AKADEMII NAUK LITOVSKOY SSR, SERIYA B: KHIMIYA, TEKHNIKA, FIZICHESKAYA GEOGRAFIYA, No 3(136), 1983)..... 82

Improving the Use of Optimization Calculations in Automated Control Systems of Ukrainian SSR
(V. S. Mikhalevich, M. T. Matveyev, et al.; MEKHANIZATSIYA I AVTOMATIZATSIYA UPRAVLENIYA (NAUCHNO-PROIZVODSTVENNYY SBORNIK), No 4, Oct-Dec 83).... 85

Current Problems of Developing Third Stage of Automated System for State Statistics
(N. Ivanov, A. Maslyanenko; VESTNIK STATISTIKI, No 10, Oct 83)..... 91

NETWORKS

Logic Interface Protocol for Local Integration of User and Communication Computers
(Vladimir Afanas'yevich Artamonov; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83)... 99

ODA-2OM Monochannel Terminal Network
(Semen Naumovich Zharovskiy; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83)..... 110

CONFERENCES

Third All-Union Conference 'Dialog-83'
(Stanislav Vladimirovich Klimenko, Leonina Nikolayevna Nekrasova, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83)..... 121

Application of Active Teaching Methods
(Yuriy Ovseyevich Kogan; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83)..... 124

ORGANIZATIONS

Activity of Institute of Mathematics and Cybernetics in 1977-1981
(Ch. Sipavichyus, V. Petrauskas; TRUDY AKADEMII NAUK LITOVSKOY SSR, SERIYA B: KHIMIYA, TEKHNIKA, FIZICHESKAYA GEOGRAFIYA, No 3(136), 1983)..... 126

PUBLICATIONS

Table of Contents of UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, November-December 1983
(UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 6, Nov-Dec 83).. 137

JPRS-UCC-84-004

11 July 1984

USSR REPORT

CYBERNETICS, COMPUTERS AND AUTOMATION TECHNOLOGY

CONTENTS

GENERAL

Organizational Problems in Development, Repair of Computers
(Yu. Nesterikhin; TRUD, 20 Jan 84)..... 1

Problems in Status and Training of Computer Programmers
(A. Yershov; IZVESTIYA, 3 Feb 84)..... 4

HARDWARE

Computer Collective Pledges Quality for 1984
(SOVETSKAYA BELORUSSIYA, 8 Jan 84)..... 8

Hardware-Software Facilities in Diagnostic System for PS-2000 Multiprocessor
(Nadezhda Vasil'yevna Belil'shchikova, Viktor Vasil'yevich Zastela, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 10

Display Panels From Armenia
(EKONOMICHESKAYA GAZETA, No 4, Jan 84)..... 15

Elektronika-60 - Digital Integrator Computer Complex
(Anatoliy Yakovlevich Drovyannikov, Anatoliy Stepanovich Kutovoy, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 16

Device for Matching Elektronika-60 Microcomputer to A318-6 Peripheral Memory Cassette Module of SM Computers
(L. I. Skhodtseva, I. V. Chirkin; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1, Jan-Feb 84)..... 18

Combining LSI Digital Circuits for FFT Processors
(Vadim Ivanovich Veshnyakov, Mikhail Dmitriyevich Kardashchuk, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 20

Computer-Aided Analysis of LSI Circuit Parametric Reliability
(Vladimir Vladimirovich Gorovoy, Aleksandr Grigor'yevich Sakhashchik, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 30

An Approach to Structural Synthesis of Microinstruction Memory Based on Programmable Logic Arrays
(Vadim Abramovich Raykhlin, Moisey Isaakovich Shvartsman; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 36

Implementing Sequential Automata With Programmable Logic Arrays
(Aleksey Aleksandrovich Butov; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 38

SM-1, SM-2 Computer Module for Data Input to PROM
(Igor' Ivanovich Don'kin, Vladimir Ivanovich Kleymenov, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 40

SOFTWARE

Some Trends in Development and Principles of Organizing Development of Software for Management Information Systems (ASU)
(Boris Borisovich Timofeyev, Aleksandr Fedorovich Kulakov, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 43

Centralized Introduction and Maintenance of Software Through Fund of Algorithms and Programs of Ukrainian SSR Academy of Sciences
(S. A. Dorozhkin; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1, Jan-Feb 84)..... 51

Investigation of Computing Process in YeS Operating System
(V. A. Korotkevich, I. V. Maksimey, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1, Jan-Feb 84)... 55

Approach to Developing Real-Time Operating Systems for Problem-Oriented Computer Complexes
(Aleksandr Nikolayevich Dolgov; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 57

Unified Operating System for Elektronika-60, SM-3, SM-4 Computers
(Vladimir Vladimirovich Kibitkin; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83)..... 67

RELBAS Relational Data Base Management System
(Ye. A. Barsukov, P. I. Komarov, et al.;
UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1, Jan-Feb 84)... 74

APPLICATIONS

GRIS Interactive Graphics System for Minicomputer Systems
(Gennadiy Pavlovich Demidov, Vladimir Ivanovich Peskov,
et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5,
Sep-Oct 83)..... 84

Computer Assisted Agricultural Management
(P. Arkhipov; EKONOMICHESKAYA GAZETA, No 4, Jan 84)..... 89

NETWORKS

Diskret Computer Network Based on Packet Radio Link
(Andrey Mikhaylovich Luchuk, Rafail Grigor'yevich
Ofengenden, et al.; UPRAVLYAYUSHCHIYE SISTEMY I
MASHINY, No 5, Sep-Oct 83)..... 91

CONFERENCES

Organizational Aids, Hardware and Software for Management of
Computing Process
(B. N. Pan'shin; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY,
No 1, Jan-Feb 84)..... 104

Interactive Man-Machine Systems
(V. I. Branovitskiy, N. A. Vlasenko; UPRAVLYAYUSHCHIYE
SISTEMY I MASHINY, No 1, Jan-Feb 84)..... 110

School-Seminar on Interactive Systems
(Aleksey Mikhaylovich Dovgyallo, Mikhail Geogiyevich
Khoshtaria; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5,
Sep-Oct 83)..... 114

PUBLICATIONS

New Journal: MIKROPROTSESSORNYYE SREDSTVA I SISTEMY
(UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1, Jan-Feb 84).. 117

Table of Contents: UPRAVLYAYUSHCHIYE SISTEMY I MASHINY No 5,
1983
(UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 5, Sep-Oct 83).. 118

Table of Contents: UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1,
Jan-Feb 84
(UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 1, Jan-Feb 84).. 123

PERSONALITIES

Tribute to Glushkov
(Yuriy Georgiyevich Krivonos; UPRAVLYAYUSHCHIYE SISTEMY
I MASHINY, No 5, Sep-Oct 83)..... 127

JPRS-UCC-84-005

31 October 1984

USSR REPORT

CYBERNETICS, COMPUTERS AND AUTOMATION TECHNOLOGY

CONTENTS

GENERAL

Integrated Mechanization and Automation as Catalysts of Technical Progress
(Yuriy Maslyukov; EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHENLOV SEV, No 1, Jan 84)..... 1

HARDWARE

Computer Startup, Servicing Practices Criticized
(V. Shmelev, K. Karpov, et al.; SOVETSKAYA ROSSIYA, 25 Apr 84)..... 9

Exhibition of Microprocessor Technology
(A. Kondrashov; EKONOMICHESKAYA GAZETA, No 14, Apr 84)..... 11

SM 6404 Terminal for Preparation and Input of Graphics Data
(MEKHANIZATSIYA I AVTOMATIZATSIYA UPRAVLENIYA (NAUCHNO-PROIZVODSTVENNYY SBORNIK), No 2, Apr-Jun 84)... 13

Devices for Activation of Processor Components of PS-2000 Multiprocessor
(S. Ya. Vilenkin, N. I. Golovan, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 2, Mar-Apr 84).. 15

Development of Microelectronics in Hungary
(Ferenc Banyai; EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV, No 1, Jan 84)..... 21

Approach to Improving Data Processing Efficiency in Computer Systems
(Ye. I. Bryukhovich, L. Ya. Nagornyy, et al.; ELEKTRONNOYE MODELIROVANIYE, No 3, May-Jun 84)..... 26

Organization of Digital Optoelectronic Processor for Image Processing in Spatially Continuous Form
(Ye. F. Ochin; ELEKTRONNOYE MODELIROVANIYE, No 3, May-Jun 84)..... 26

Integrated-Injection Logic Majority Element
(A. Akhmadzhanov, A. M. Smolyak; IZVESTIYA AKADEMII NAUK UzSSR: SERIYA TEKHNICHESKIKH NAUK, No 3, May-Jun 84)..... 27

An Approach to Image Skeletization
(V. N. Kan, S. S. Sadykov; IZVESTIYA AKADEMII NAUK UzSSR: SERIYA TEKHNICHESKIKH NAUK, No 3, May-Jun 84)... 27

Computerized System for Investigation Electron Spin-Lattice Relaxation Time as Function of Temperature
(V. N. Dudkov, V. I. Muromtsev; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 28

Self-Contained Measurement Station Employed in Information-Measurement System of GNEYS Neutron Spectrometer
(I. S. Gorokhov, A. B. Laptev, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 28

Multichannel Data Acquisition System
(G. V. Basalayev, V. I. Glemba; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 29

Graphic Attachment for Raster Character Display
(V. D. Bakhmatskiy, V. G. Belyy, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 29

Stereo Video Display Operator-Computer Feedback Device
(G. V. Mamchev, P. P. Ovsyannikov; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 30

Digital Single-Signal Recorder
(V. Ya. Starodumov; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 30

Programmable Signal Generator
(A. L. Finarevskiy; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 31

Asynchronous-Controlled Unary-to-Binary Code Converter
(N. M. Nikityuk, V. N. Samoylov, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 31

Device for Converting Seven-Bit Code to Binary-Coded Decimal and Binary
(N. P. Leonov, I. V. Semerkov; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 32

Interfacing VDT 52106 Display and DZM-180 Printer With Elektronika-60 Microcomputer
(V. A. Dolgikh, I. V. Stupenkov, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 32

Device for Interfacing Elektronika-60 Microcomputer With Alphanumeric Display Devices
(V. V. Sorochinskiy, Yu. N. Kholodenko; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 33

Serial Interface Exchange Module for ISKRA-1256 and ISKRA-226 Computers
(V. Ya. Starodumov; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 33

Electronic Equipment in System for Sampling Multiparticle Events With Generation of Neutral Strange Particles
(Z. V. Krumshteyn, R. Lyayste, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 2, Mar-Apr 84)..... 34

Experimental Multiprocessor System Employing Eurobus Datapath
(Yu. V. Yermolin, A. A. Matyushin, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 34

CAMAC Standard Storage Buffers
(Vi Dao Byong, N. I. Zhuravlev, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 35

Device for Inputting Periodic Analog Signals to Elektronika D3-28 Microcomputer
(G. N. Deshchenko, V. S. Dragun, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 35

Device for Interfacing V9-5 Stroboscopic Voltage Converter and Elektronika D3-28 Microcomputer
(Ye. P. Snegirev; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 36

Interfacing SP-3 Paper Tape Reader and Elektronika-60 Microcomputer
(V. A. Sasunkevich, I. A. Kochkov; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 36

Interfacing F595 Transcriber With Dynamic Readout Digital Measuring Instrument
(O. I. Pilipyuk, I. T. Trofimenko; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 37

Device for Interfacing KVARTS-1 Display With CAMAC Crate Datapath
(V. N. Pikhun, A. G. Ustinov; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 37

Use of VT-340 (VDT-52100) Display as Elektronika 100-25 Computer Operator Console
(N. M. Koshechko; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 38

Device for Interfacing Elektronika-60 Microcomputer With VTA-2000 Display and Elektronika D3-28 Microcomputer
(Ya. S. Zayshlyy, V. R. Kravtsov, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 38

Interfacing Elektronika K1-10 Microcomputer With DARO-1156 Alphanumeric Printer
(S. V. Gudymenko, A. L. Gurtovtsev, et al.; PRIBORY I TEKHNIKA EKSPERIMENTA, No 3, May-Jun 84)..... 39

SOFTWARE

Advanced Software Development Technology
(V. Myasnikov; EKONOMICHESKAYA GAZETA, No 8, Feb 84).... 40

Adjustable Instrument Complex for Development of Systems in Bit-Slice Microprocessors
(O. I. Semenkov, L. A. Grinshpan, et al.; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 2, Mar-Apr 84).. 42

APPLICATIONS

Progress in Computer Applications in the Lithuanian SSR
(SOVETSKAYA LITVA, 20 Jan 84)..... 46

Sectoral Automated Management System Problems
(R. Levita, Yu. Orfeyev; PRAVDA, 2 Feb 84)..... 49

Automation of Method of Processing Information at Collective-Use Computer Center
(V. Sisko, V. Chizh; VESTNIK STATISTIKI, No 3, Mar 84).. 54

Development Prospects for Collective-Use Computer Center
(G. Kimask, V. Chiz; VESTNIK STATISTIKI, No 5, May 84)..... 60

Aspects of Technological Progress of the User Information Service of the Republic Automated System of Scientific Technical Information
(V. P. Tsymbal, A. A. Babich; MEKHANIZATSIYA I AVTOMATIZATSIYA UPRAVLENIYA (NAUCHNO-PROIZVODSTVENNYY SBORNIK), No 2, Apr-Jun 84)..... 69

Cost-Effectiveness of Computers in Belorussian Light Industry Discussed
(E. Bolyanskiy; PROMYSHLENNOST' BELORUSSII, No 11, Nov 83)..... 73

Use of Robots and Microprocessors in Chemistry
(Karl Hansel; EKONOMICHESKOYE SOTRUDNICHESTVO STRANCHLENOV SEV, No 1, Jan 84)..... 78

NETWORKS

Problems of Developing, Introducing Automated System for Maintaining Primary Trunk Line and Secondary Networks for Communication in the Country
(V. G. Bondarenko, V. G. Kryachek; MEKHANIZATSIYA I AVTOMATIZATSIYA,UPRAVLENIYA (NAUCHNO-PROIZVODSTVENNYY SBORNIK), No 1, Jan-Mar 84)..... 82

ODA-20M Microprocessor Network Station
(MEKHANIZATSIYA I AVTOMATIZATSIYA UPRAVLENIYA (NAUCHNO-PROIZVODSTVENNYY SBORNIK), No 1, Jan-Mar 84)..... 85

CONFERENCES

'Microprocessor Systems in ASUTP's' Conference
(I. S. Yeremeyev, G. S. Kodenskiy; UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 3, May-Jun 84)..... 86

PUBLICATIONS

Table of Contents: UPRAVLYAYUSHCHIYE SISTEMY I MASHINY No 2, 1984
(UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 2, Mar-Apr 84) 89

Table of Contents: UPRAVLYAYUSHCHIYE SISTEMY I MASHINY No 3, 1984
(UPRAVLYAYUSHCHIYE SISTEMY I MASHINY, No 3, May-Jun 84). 94

END OF FICHE DATE FILMED

6 Feb 1985